Effective Early Intervention for Autistic Children: Enabling Environments and the Roles of Adults







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Disclosures

- I will be talking briefly about the Autism Program Environment Rating Scale (APERS) today, for which I am the first author. It is published by Brookes Publishing Co. and generates royalties that are allocated to the National Clearinghouse for Autism Evidence and Practice. I receive no royalties.

Definitions of Early Intervention (Odom, 1989)

Procedures that facilitate the development or skill acquisition of infants and young children who have disabilities

… the childhood years in which early intervention might occur b**egin at birth,** … ranges from **5 to 7 years of age** for most children.

We presume that for many intervention programs, families play a central role.

Programs that are designed to prevent handicapping conditions

What is “Early Intervention”?

Find your state or territory’s early intervention program

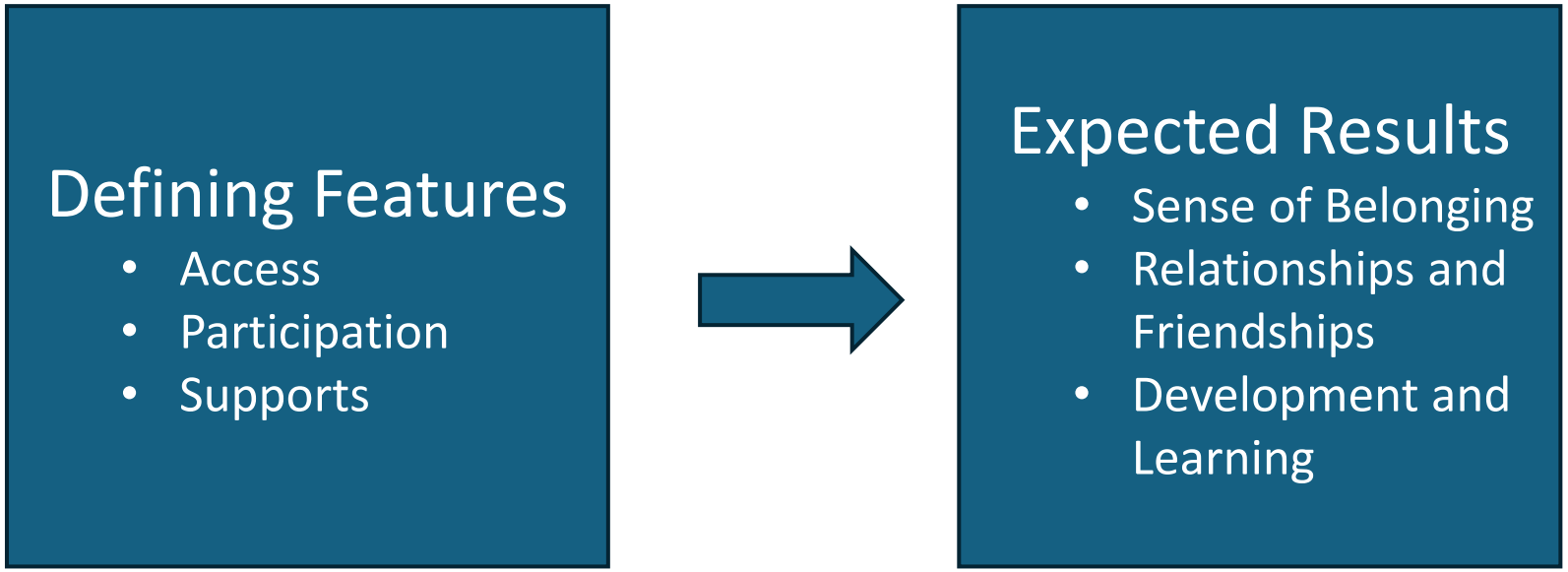


Early Intervention…

- Is the term used to describe the services and supports that are available to babies and young children with developmental delays and disabilities and their families.
- May include speech therapy, physical therapy, and other types of services based on the needs of the child and family.
- Can have a significant impact on a child’s ability to learn new skills and overcome challenges and can increase success in school and life.
- Programs are available in every state and territory (see each program’s contact information below). These publicly funded programs provide services for free or at reduced cost for any child who is eligible.

A Summary of the Joint Position Statement of the Division for Early Childhood (DEC) and the National Association for the Education of Young Children (NAEYC)

Early Childhood Inclusion: A Summary



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. DEPARTMENT OF EDUCATION

POLICY STATEMENT ON INCLUSION OF CHILDREN WITH DISABILITIES IN EARLY CHILDHOOD PROGRAMS

September 14, 2015

- Setting an expectation for high-quality inclusion in early childhood programs;
- Increasing public understanding of the science that supports meaningful inclusion of children with disabilities, from the earliest ages, in early childhood programs;
- Highlighting the legal foundations supporting inclusion in high-quality early childhood programs;
- Providing recommendations to States, LEAs, schools, and early childhood programs for increasing inclusive early learning opportunities for all children; and
- Identifying free resources for States, programs, early childhood personnel[ii], and families to support high-quality individualized programming and inclusion of children with disabilities in early childhood programs.

Forms of Early Intervention and Early Childhood Special Education in the United States

- Birth to 3
  - Defined by states
  - Happens in natural environment which usually means home
- 3-6 Year
  - Mandated for public school to provide services beginning at 3
  - Special Education Center-based
  - Inclusive Center-based (Maybe closest to Sweden)

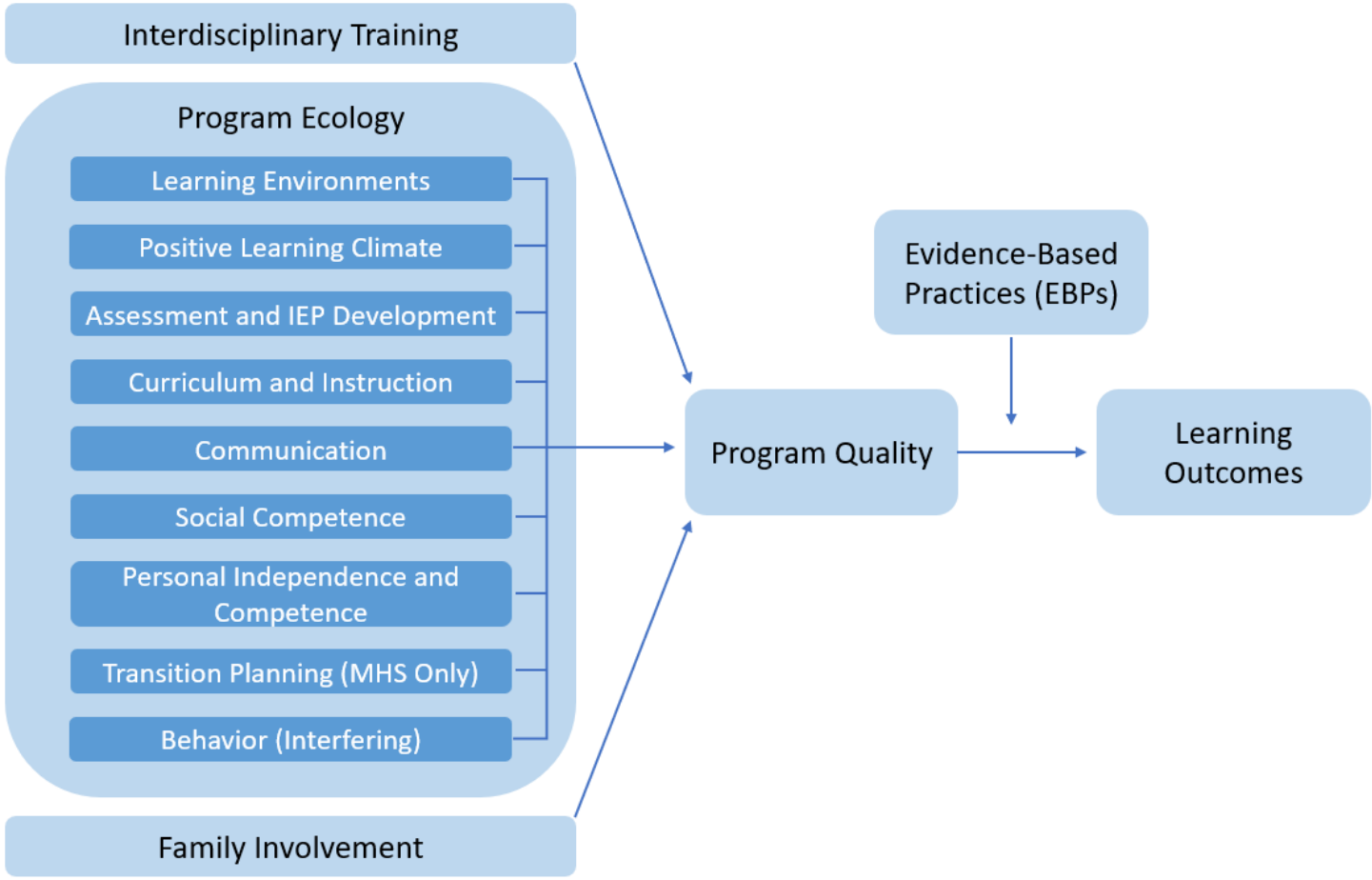


Fixsen et al. 2010; National Implementation Research Network, 2013

Inclusive Early Intervention for Young Autistic Students

- Enabling Environments
  - Autism Program Environment Rating Scale (APERS-PE)
- Effective Practices
  - AFIRM and EBPs
  - Discrete trial training
  - Naturalistic Interventions/Embedded Teaching
  - Playtime/Social Time
  - Dialogic Reading
  - Outdoor Play
- Effective Implementation
  - Role of adults
  - Role of families

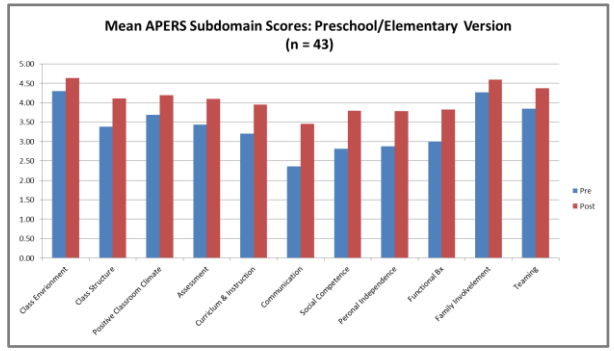
Autism Program Environment Rating Scale (APERS) Process

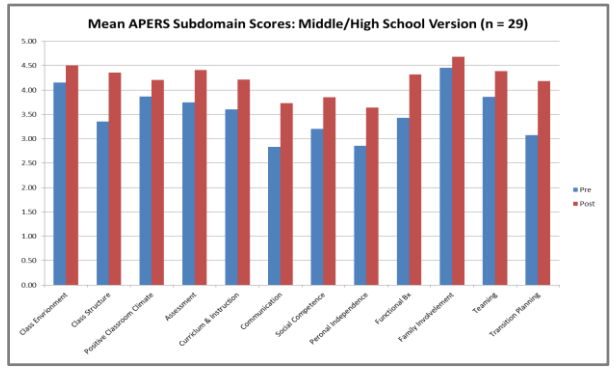


Features of APERS

See page 83 of **User's Guide**

- Two APERS formats:
  - PE
  - MHS Odom et al., 2018
- Organized by domains and subdomains
- Applicable in self-contained and inclusive programs
- Scored on a five-point scale with behavioral anchors at three points
- Results can be summarized by scores or graphs
- Self-assessment for PE and MHS versions





Odom et al., 2018

Consultation Using the APERS

- Building a supportive environment for autistic children is critical
- One approach to measure and supporting quality is the Autism Program Environment Rating Scale.
- This measure assess 10 domains (e.g., social climate, assessment, communication instruction, social skills instruction)
- Generates information for improving environmental supports when paired with consultation



Journal of Autism and Developmental Disorders (2019) 49:1853–1862
https://doi.org/10.1007/s10803-018-03870-5

ORIGINALPAPER

Cross-Cultural Content Validity of the Autism Program Environment Rating Scale in Sweden

Hampus Bejnö[1] · Lise Roll-Pettersson[1] · Lars Klintwall[2] · Ulrika Långh[3,4,5] · Samuel L. Odom[6] · Sven Bölte[3,4,7,8]

Journal of Autism and Developmental Disorders
https://doi.org/10.1007/s10803-021-05268-2

ORIGINAL PAPER

From Someone Who May Cause Trouble to Someone You Can Play With: Stakeholders' Perspectives on Preschool Program Quality for Autistic Children

Hampus Bejnö[1] · Sven Bölte[2,3,6,7,8] · Nina Linder[1] · Ulrika Långh[2,3,4,8] · Samuel L. Odom[5] · Lise Roll-Pettersson



Scandinavian Journal of Occupational Therapy

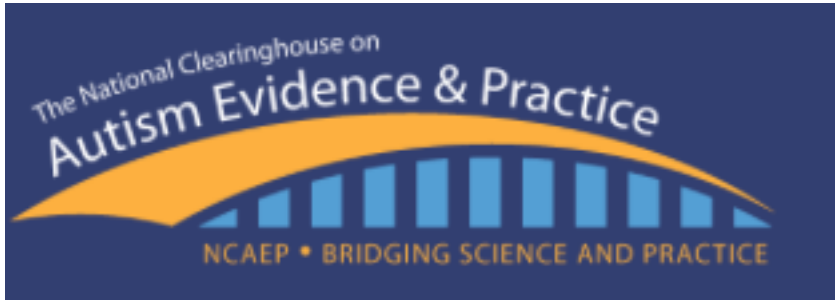
ISSN: (Print) (Online) Journal homepage: https://www.tandfonline.com/loi/iocc20

Adapting the preschool environment to the needs of children on the autism spectrum in Sweden: A quasi-experimental study

Hampus Bejnö, Lise Roll-Pettersson, Lars Klintwall, Ulrika Långh, Samuel L. Odom & Sven Bölte

NCAEP and AFIRM Modules

- National Clearinghouse for Autism Evidence and Practice (NCAEP)
  - Systematic Review of literature from 1990-2017
  - Identified 28 evidence-based practices
  - https://ncaep.fpg.unc.edu/
- Autism Focus Intervention Resources and Materials (AFIRM)
  - E-learning modules for all practices
  - https://afirm.fpg.unc.edu





Evidence-Based Practices

- Antecedent-Based Interventions
- Augmentative and Alternative Communication
- Behavioral Momentum Intervention
- Cognitive Behavioral/Instructional Strategies
- Differential Reinforcement of Alternative, Incompatible, or Other Behavior
- Direct Instruction
- Discrete Trial Training
- Exercise and Movement
- Extinction
- Functional Behavioral Assessment
- Functional Communication Training
- Modeling
- Music-Mediated Intervention
- Naturalistic Intervention
- Parent-Implemented Intervention
- Peer-Based Instruction and Intervention
- Prompting
- Reinforcement
- Response Interruption/Redirection
- Self-Management
- Sensory Integration®
- Social Narratives
- Social Skills Training
- Task Analysis
- Technology-Aided Instruction and Intervention
- Time Delay
- Video Modeling
- Visual Supports

Find the EBP definitions at http://go.unc.edu/2020EBPs.

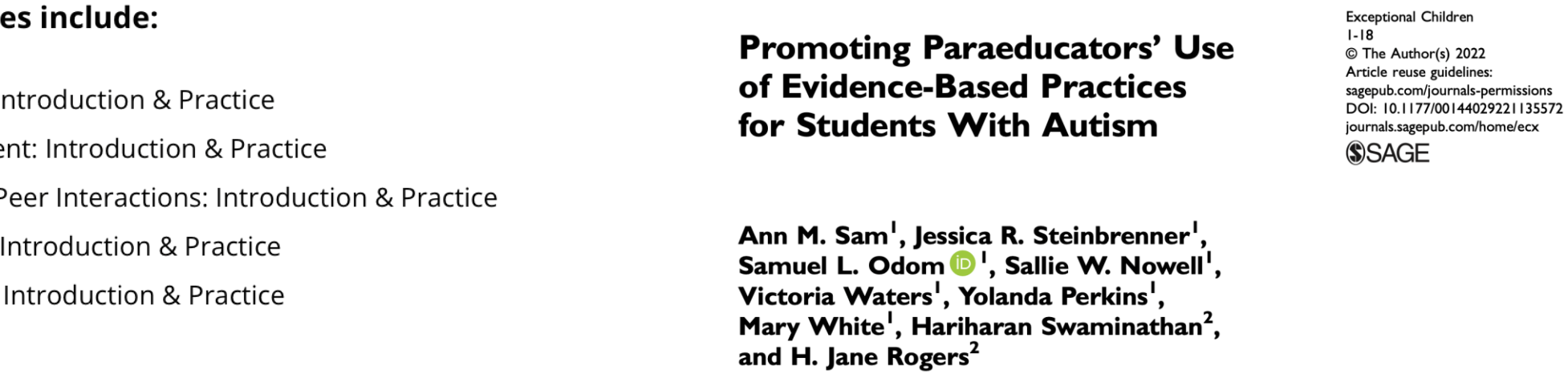
AFIRM for Paraeducators

AFIRM for Paras are a set a of modules for paraeducators working with elementary schoolers on the spectrum. Select the button below to access the AFIRM for Paras modules.

List of modules include:

- Prompting: Introduction & Practice
- Reinforcement: Introduction & Practice
- Supporting Peer Interactions: Introduction & Practice
- Time Delay: Introduction & Practice
- Visual Cues: Introduction & Practice

Access AFIRM for Paraeducators modules



Original Research

Promoting Paraeducators' Use of Evidence-Based Practices for Students With Autism

Exceptional Children
1-18
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DOI: 10.1177/00144029221135572
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SAGE

Ann M. Sam[1], Jessica R. Steinbrenner[1], Samuel L. Odom[1], Sallie W. Nowell[1], Victoria Waters[1], Yolanda Perkins[1], Mary White[1], Hariharan Swaminathan[2], and H. Jane Rogers[2]

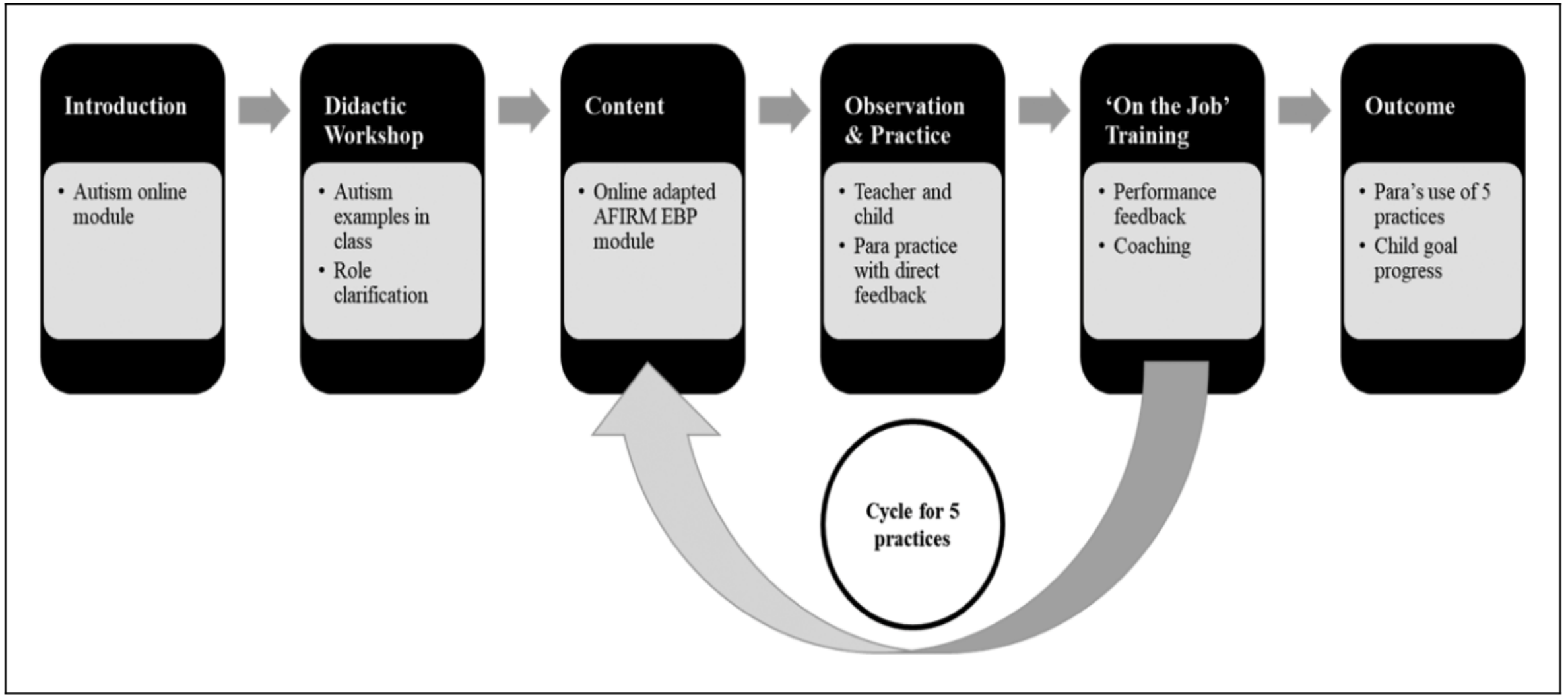


Figure 1. Operational framework for Autism Focused Intervention Resources and Modules for Paraeducators.

Discrete Trial Instruction



COMPONENTS OF DISCRETE TRIAL TRAINING

STEP ONE

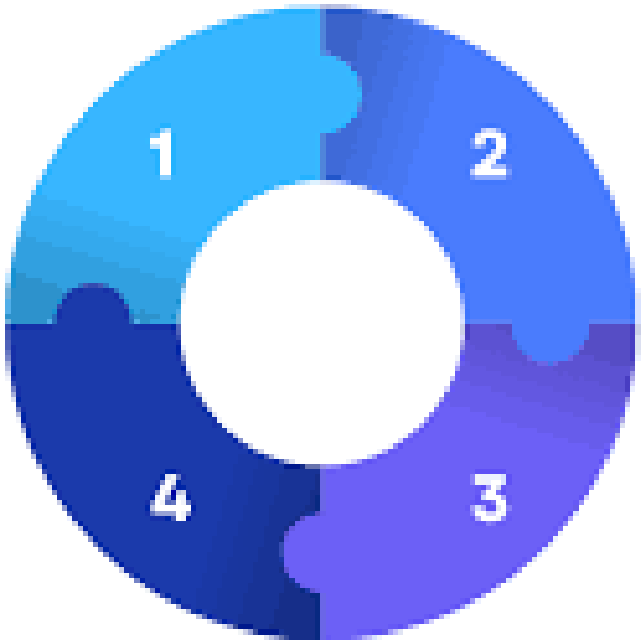
ANTECEDENT

therapist shows a picture of a dog and asks, "What is this?"

STEP TWO

PROMPTING

The therapist says, "It's a dog"



STEP FOUR

CONSEQUENCE

The therapist says, "Yes, that's right!" and praises the child.

STEP THREE

RESPONSE

The child looks at the picture and says, "Dog"



Naturalistic Instruction/Embedded Teaching

- Identify specific learning goal for student
- Examine schedule for opportunities for student to practice goal
- Plan times for student to work on goal
- Arrange the environment to provide learning opportunities
- Provide support needed (to successfully engage)
- Plan for positive natural consequences

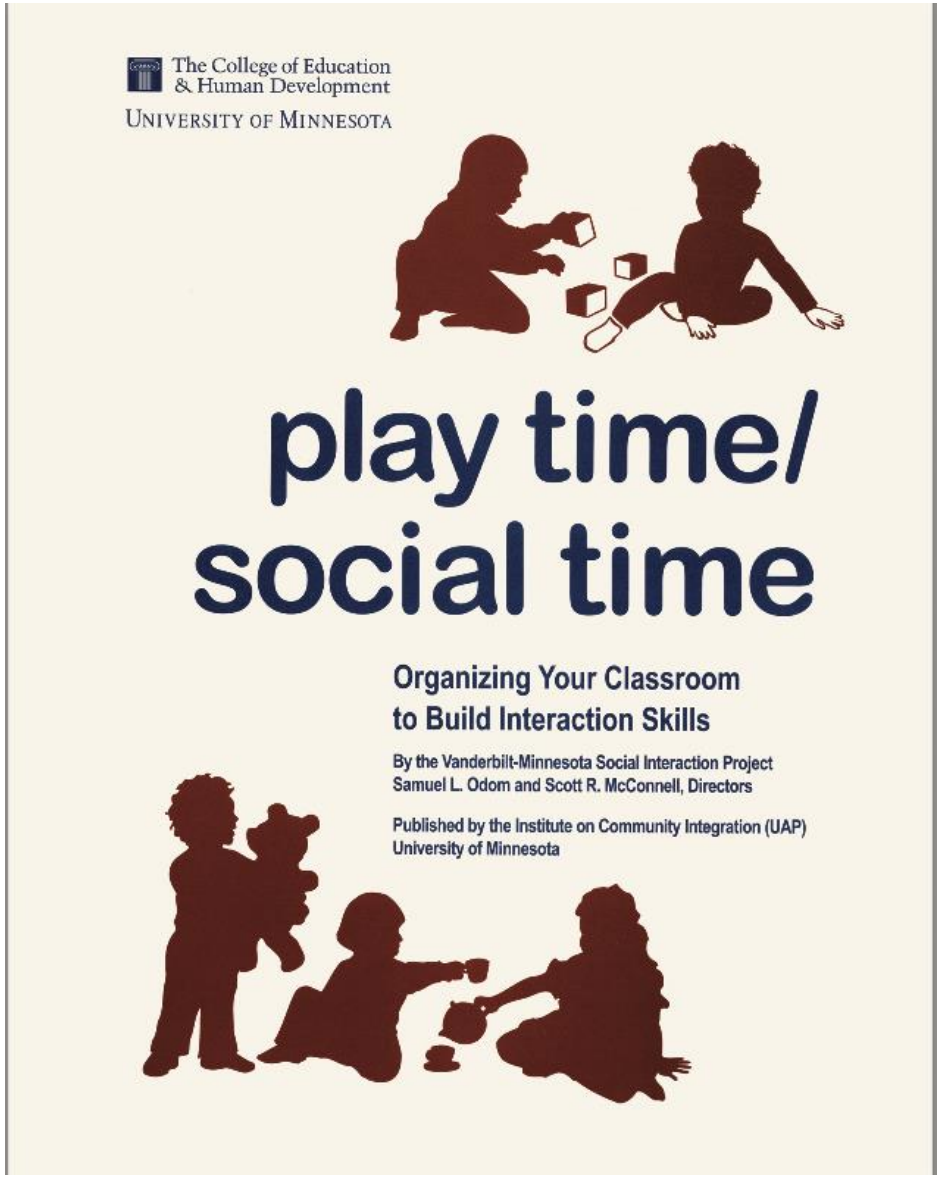
Embedded Instruction For Early Learning

https://ceecs.education.ufl.edu/work/embedded-instruction-for-early-learning-2/



Playtime/Social Time

- Small group circle time
  - 3-4 children (one with autism)
  - Teachers introduces social skills (sharing, play ideas, responding)
  - Children practice with teacher assistance and feedback
- Children practice in structured play group



EUROPEAN EARLY CHILDHOOD EDUCATION RESEARCH JOURNAL
2023, VOL. 31, NO. 1, 124–142
https://doi.org/10.1080/1350293X.2022.2157460

EECERA

Routledge
Taylor & Francis Group

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Introducing a program supporting social interactions and play in inclusive preschools in Sweden: reflections on a stepwise collaborative implementation process

Eva Siljehag and Mara Westling Allodi

Department of Special Education, Stockholm University, Stock

Play Time/Social Time: ett sätt att främja inkludering i svensk förskola?

Aldskogius, Suzanne
Stockholm University, Faculty of Social Sciences, Department of Special Education.
Persson, Katja
Stockholm University, Faculty of Social Sciences, Department of Special Education.

2016 (Swedish)

Independent thesis Advanced level (professional degree), 10 credits / 15 HE credits

Student thesis

promote inclusion in swedish preschool (English)



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Inclusive & Special Education

Teachers' perceptions of using peer-mediated instruction and intervention for supporting children's social skills and play between children in inclusive preschools

Maria Gladh, E. Siljehag, M. Westling Allodi & S. R. Sandall

Article: 2460969 | Received 29 Jul 2024, Accepted 27 Jan 2025, Published online: 17 Feb 2025

frontiers Abou

Frontiers in Education

Supporting children's social play with peer-based intervention and instruction in four inclusive Swedish preschools



Maria Gladh[1*]

Eva Siljehag[1]



Mara Westling Allodi[1]

Samuel L. Odom[2]



International Journal of Developmental Disabilities ›
Volume 62, 2016 - Issue 1

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Original Articles

Can play develop social skills? The effects of 'Play Time/Social Time' programme implementation

Grzegorz Szumski, Joanna Smogorzewska & Maciej Karwowski

Pages 41-50 | Published online: 26 Feb 2016

Dialogic Reading

A prompting technique that actively encourages student discourse throughout the reading of a text. Types of prompts can include...



C	**Completion**: Prompt students with a sentence starter. They fill in the blank!
R	**Recall**: Students are prompted share their understanding of what was read.
O	**Open-ended**: Prompt students to reflect on and question what they've read.
W	**Wh**:Who, what, when, where, why, and how questions.
D	**Distancing**: Students are prompted to make connections between what was read and their own experiences.

Dialogic Reading

Topics in Early Childhood Special Education
Volume 37, Issue 1, May 2017, Pages 16-28
© Hammill Institute on Disabilities 2016, Article Reuse Guidelines
https://doi.org/10.1177/0271121416637597

Interventions and Autism Spectrum Disorder

A Modified Dialogic Reading Intervention for Preschool Children With Autism Spectrum Disorder

Veronica P. Fleury, PhD[1], and Ilene S. Schwartz, PhD[2]

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Research Article

Dialogic reading in preschool: a pragmatic randomized trial enrolling additional language learners

Rasmus Riad, Mara Westling Allodi, Eva Siljehag & Sven Bölte

Received 02 Oct 2023, Accepted 06 Apr 2024, Published online: 06 May 2024

Exceptional Children
Volume 88, Issue 1, October 2021, Pages 45-64
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https://doi.org/10.1177/00144029211031865

Special Section

Early Lessons Learned in Designing an Adaptive Shared Reading Intervention for Preschoolers With Autism

Veronica P. Fleury [1] and Jacqueline A. Towson[2]

Outdoor Inclusion for Young Autistic Children

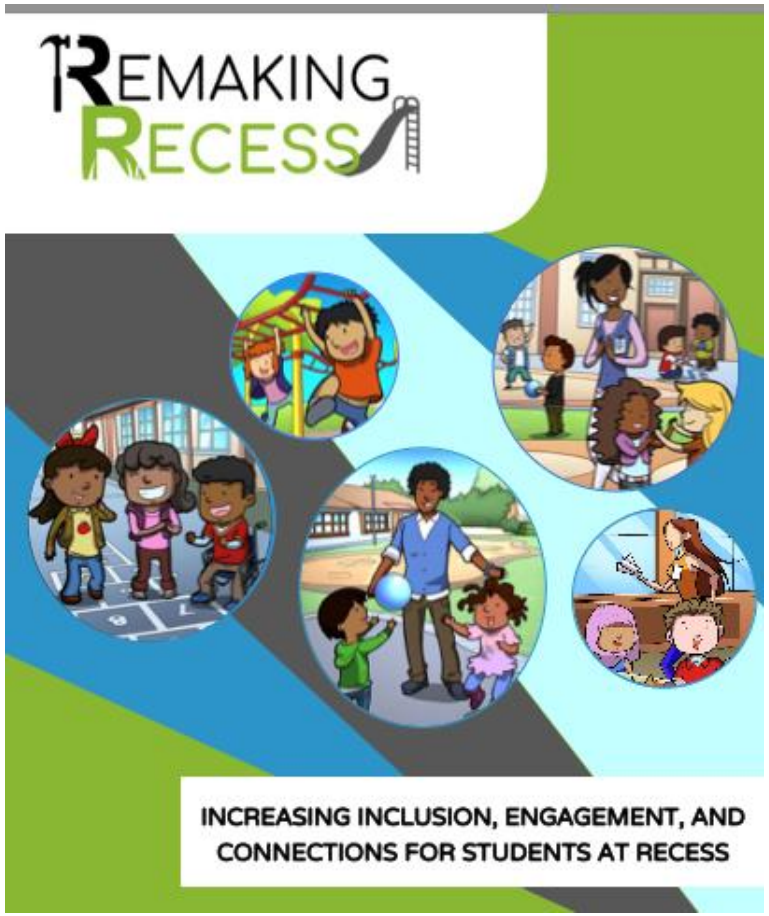
- In most Swedish early care programs outdoor activities are an important part of the day
- Built around active physical and social engagement in a health environment
- Under-utilized time for fostering inclusive social opportunities







Increased Interest in the U. S. for Recess as Time for Inclusion



https://drive.google.com/file/d/1AD6fLM7qnQyxh-6aZmAB-7ImTKTOoat0/view

Locke, J., Kretzmann, M., Smith, T., Mandell, D., & Kasari, C. (2014). Remaking recess: a school-based social engagement intervention for children with autism. *Autism Spectrum News*, *7*(2), 4.



Focus on Learning, Interaction, and Play (FLIP) at Recess

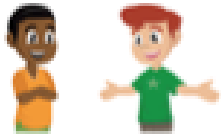
F.L.I.P RECESS

https://publications.ici.umn.edu/ties/peer-engagement/practice-guides/recess

Strategies for Getting Your Friend to Play

Brock et al., 2024

https://publications.ici.umn.edu/ties/peer-engagement/practice-guides/recess



Getting your buddy to look at you.

If you want to talk to your buddy and your buddy isn't looking at you, get their attention by...

1. Saying your buddy's name .
2. Looking at your buddy's eyes.
3. If your buddy still isn't looking at you, asking them to look at your face.

Be patient. Sometimes it might take a little while to get your buddy's attention.



Asking your buddy to play something with you.

- Asking them if they want to play something with you, if your buddy isn't playing with anyone.
- Trying to think of something to play that you think your buddy will like.
- Offering more than one idea to play and letting your buddy choose.



Showing and talking about how to play.

- Showing them how to do it if your buddy isn't sure how to play something.
- Talking about what you are doing as you show them.



Complimenting your buddy.

- Telling your buddy they are doing a good job when they try something.
- Giving your buddy a high five, fist bump, or pat on the back.



Taking turns with your buddy if you can't play at the same time.

- Explaining to your buddy what is happening when it's time to change turns.



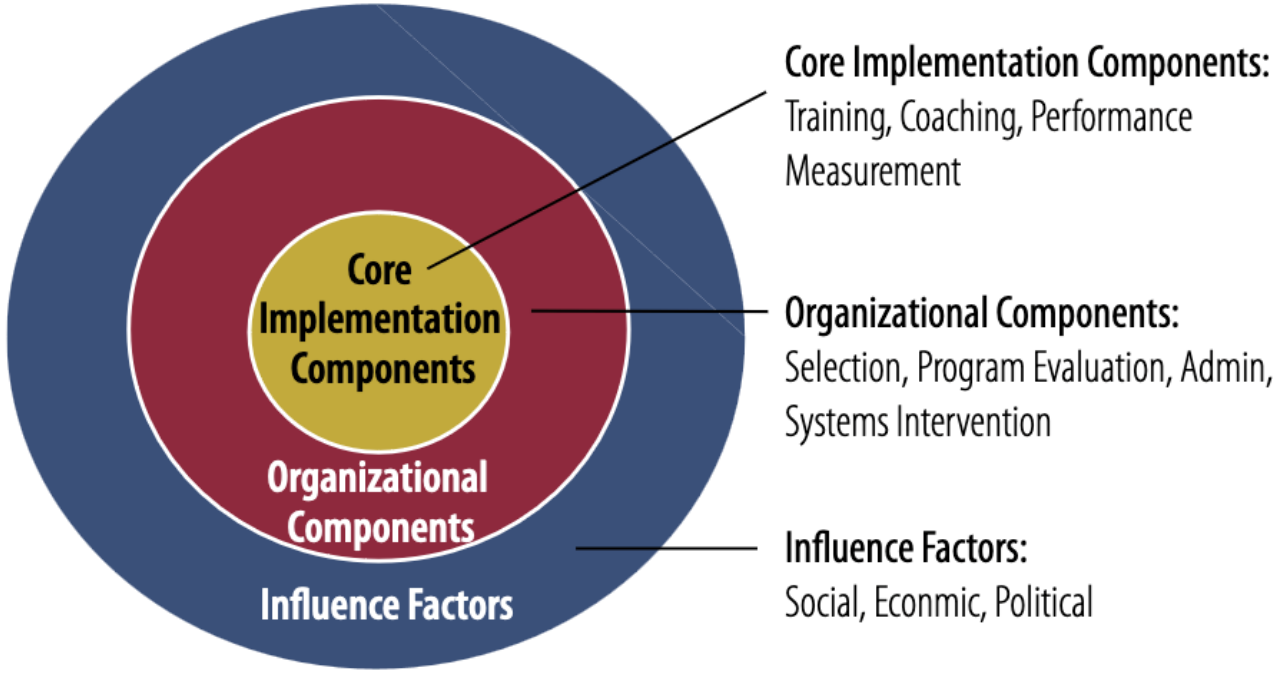
Fixsen et al. 2010; National Implementation Research Network, 2013

Effective Implementation: Roles and responsibilities of the Adults

- Teachers in Early Childhood Program
  - Acceptance of inclusion of autistic child
    - Full member of the class
  - Willing to make accommodations
  - Willing to receive support
- Para-educator
  - Willing to work directly with autistic child and also help with others
  - Ability to received feedback without feeling criticized
  - Willingness to allow distance between autistic child
- External Consultant/Supervisor
  - Willing to provide information to teacher
  - Planning for individual autistic child based on learning needs and setting
  - Commit to ongoing observation and communication (In school or remote)

Systems Approach to Implementation

Figure 5
Multilevel Influences on Successful Implementation



Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). Implementation Research: A Synthesis of the Literature. Tampa, FL: Universityvof South Florida, Louis de la Parte Florida Mental Health Institute, The NationalvImplementation Research Network (FMHI Publication #231).

Conclusion

- Effective early intervention occurs in inclusive settings for most children with autism
- Successful early intervention require support:
  - Time
  - Some training
- A common and agreed vision for inclusion essential
  - Agreement on roles, responsibilities, and goals
- Administrative support from municipalities and ministries critical Training
  - Monitoring and rewarding great early intervention and inclusive practices